Hybrid Flexible (HyFlex) Instruction: What, How, Why, and When to Use?

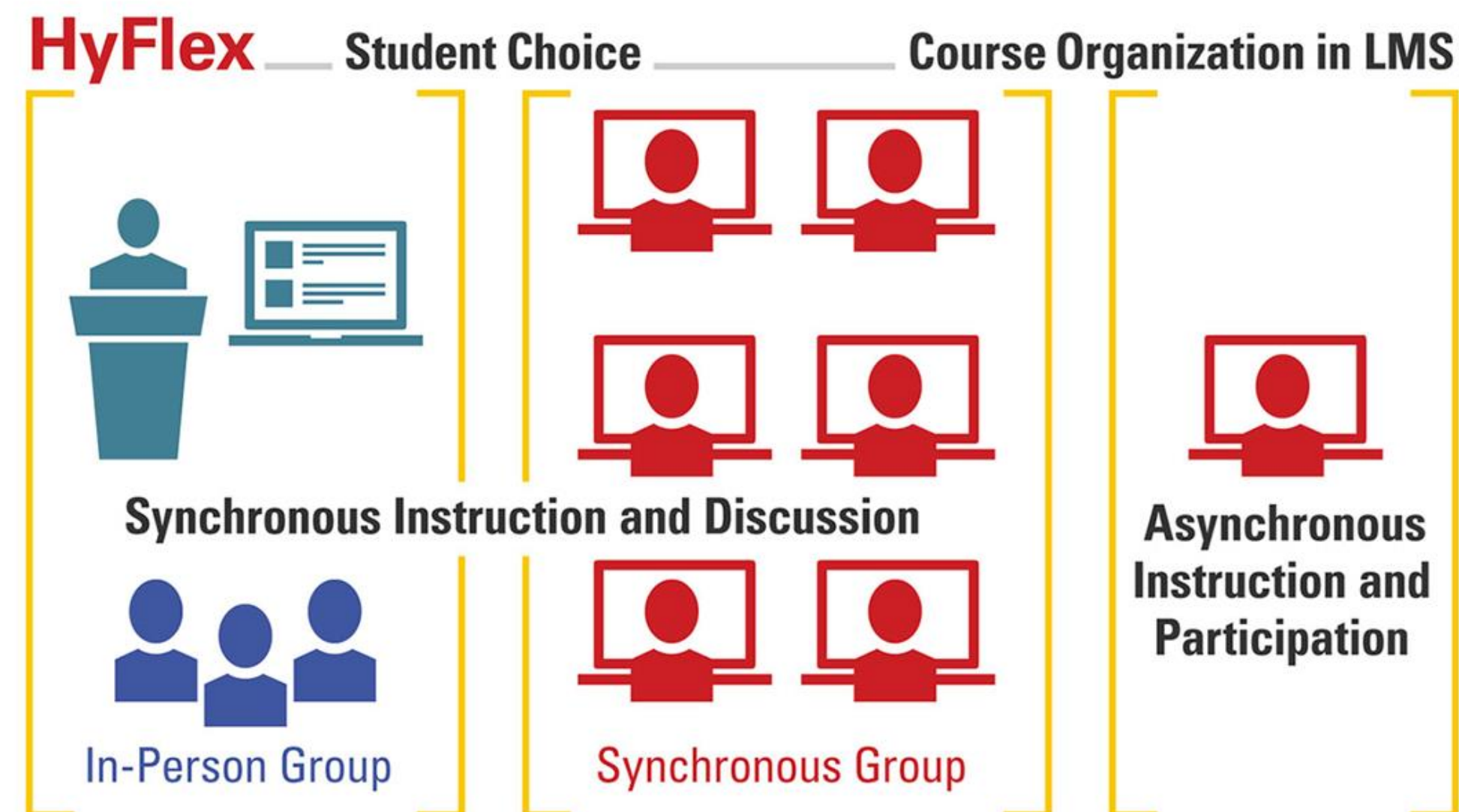## Lina Battestilli, Elaine Bohórquez, April Fogleman, Sarah Khan

Hy(brid) Flex(ible): Gives learners the flexibility to choose how to learn. Instructor provides multiple learning modalities simultaneously while maintaining learning quality among all .


MOTIVATION

- Sudden changes in instruction during and post pandemic.
- Uncertainty among learners during "return to school" period (Fall '21)
- All instructors had no prior experience with HyFlex instruction

CONTEXT

4 instructors, 3 colleges, 6 courses,
633 students, Spring 2022

College	Class	Level	#
Management	Information Systems Management	UG	53
	Systems Analysis & Design	UG	57
Engineering	Introduction to Computing MATLAB	UG	246
Agriculture & Life Sciences	Public Health Nutrition	UG	37
	Maternal & Infant Nutrition	GR	42
	General Physiology II	GR	102
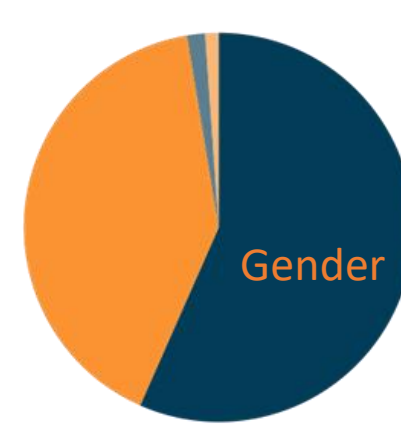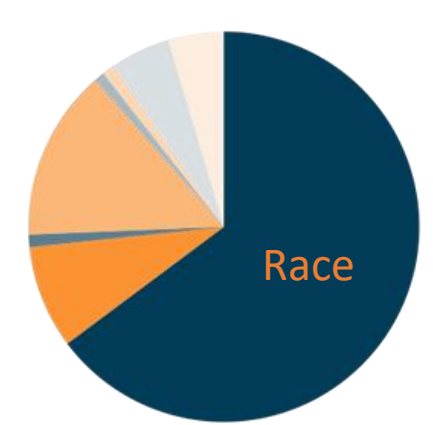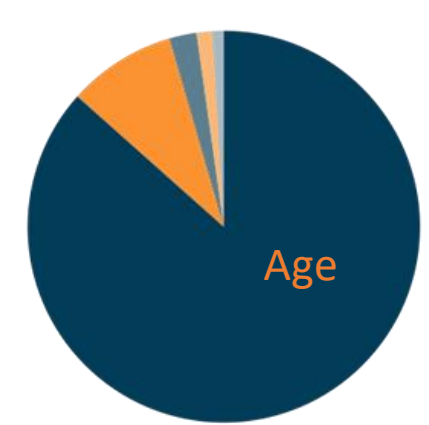
METHODOLOGY*

- Empirical study across **seven** factors, with **84.83%** consent rate.
  - HyFlex acceptance and usage, Student Engagement, Self-Directed Learning, Academic Stress, Covid-19 Related Stress, Student Satisfaction, Course Performance
- Previously validated instruments, slightly modified for HyFlex
- Survey administered during the last 2 weeks of the semester

* Further details about the methodology is available from the authors.

KEY FINDINGS

✓ HyFlex instructional design is **NOT** suitable for all students
✓ Flexibility to choose the learning modality is preferred by most students, followed by asynchronous learning.
✓ Students were overall **satisfied** with the HyFlex instruction.
✓ Pandemic-related stress impacted students' motivation to learn by increasing their desire to learn.
✓ Students can thrive in a HyFlex instructional design setting with careful monitoring
✓ Instructors need to:
  - Set expectations
  - Be consistent with course design
  - Give continuous feedback (performance, SDL)

KEY TAKEAWAYS

- Is HyFlex instructional design easy to implement? *Yes!*
- Is HyFlex instructional design suitable for all students? *No!*
- Did pandemic-related stress impact students' motivation to learn? *It increased their desire to learn!*
- Can students thrive in a HyFlex instructional design setting? *Yes, with careful monitoring!*
- How can instructors facilitate students in a HyFlex instructional design setting? *Set expectations, consistent course design, continuous feedback*

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*The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this project.

SURVEY

Measurement	Source	# of Questions
HyFlex Perceptions	Technology Acceptance Model	24
Student Engagement	Student course engagement questionnaire	24
Academic Stress	Perceptions of Academic Stress, Academic Workload	8
COVID-19 Impact	COVID-19 Student Stress Questionnaire	6
Student Satisfaction	ARCS Model with Satisfaction in HyFlex	17
Self-Directed Learning	Self-directed learning readiness scale	28

POPULAR HyFlex LEARNING MODES

Course Flexibility Usage

Course Instructional Resources Usage

Course Help Resources Usage
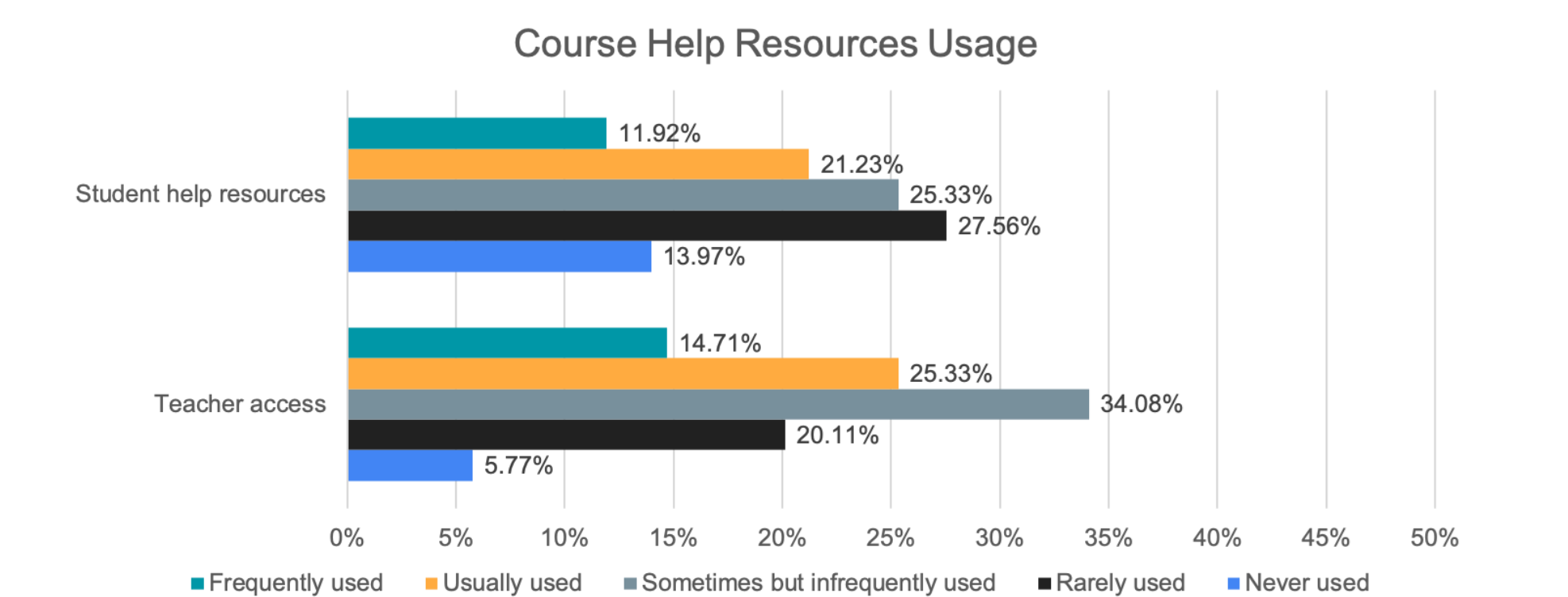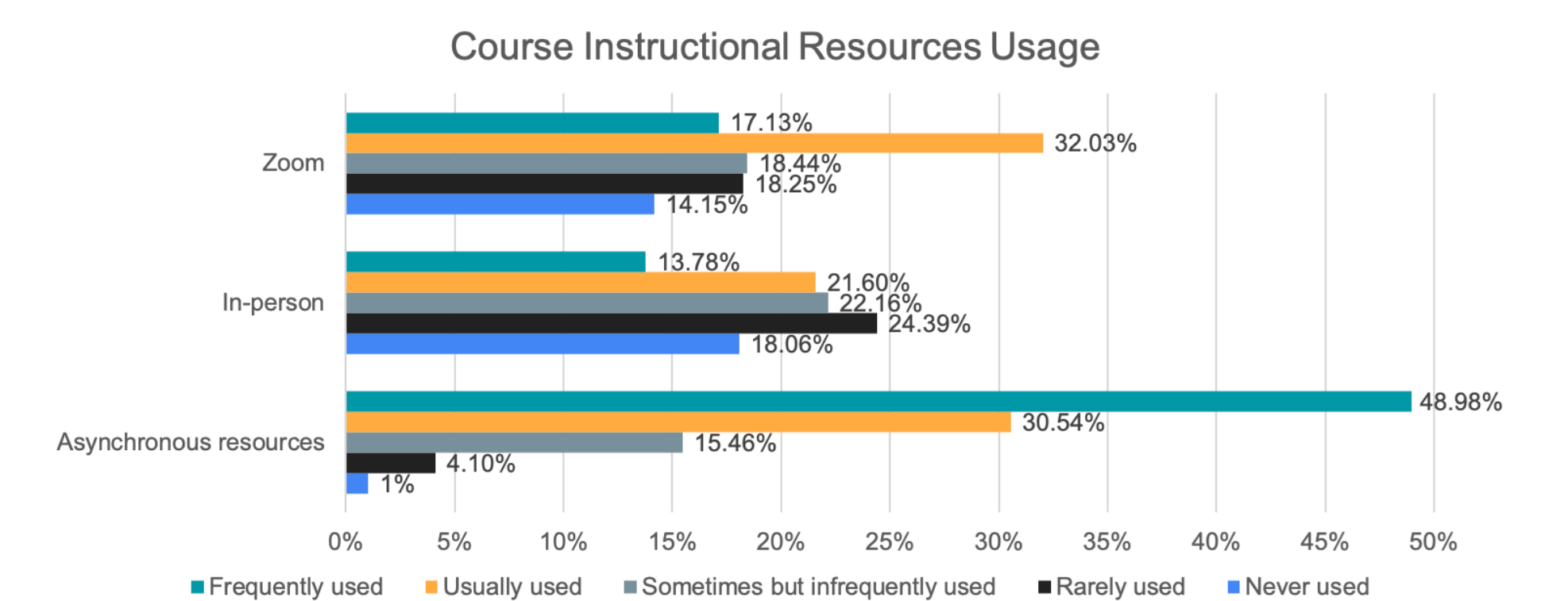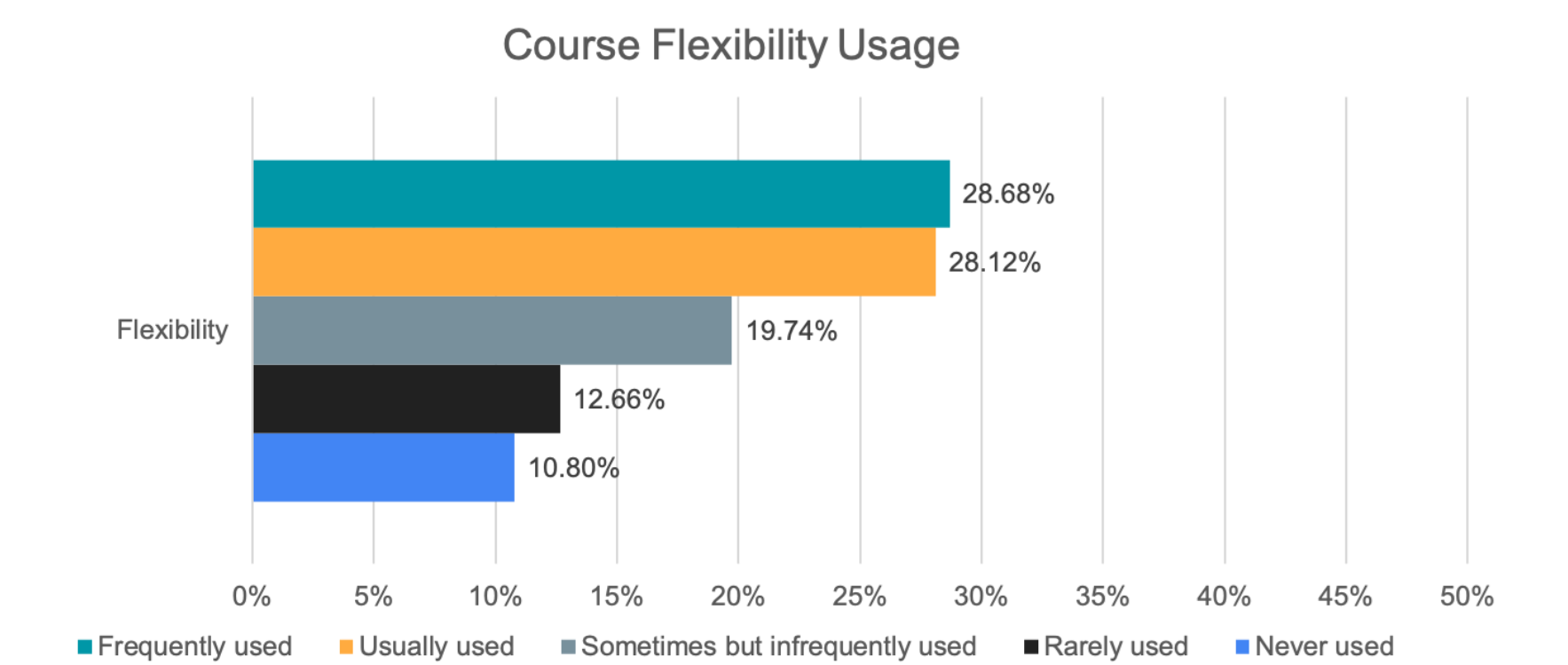
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